Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbiological contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

**Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Nephelometric Turbidity Unit (NTU):** A measure of the cloudiness of water. We monitor turbidity because it is a good indicator of the effectiveness of oure filtration system.

#### **KEY:** for all units used in table

AL Action Level

MCL Maximum Contaminant Level
MCLG Maximum Contaminant Level Goal
MRDL Maximum Residual Disinfectant Level
MRDLG Maximum Residual Disinfectant Level Goal

NA Not Applicable

ND Not detected at testing limit

NR Not regulated

NTU Nephelometric Turbidity Unit

**ppb** Parts per billion or micrograms per liter (one part per billion is

equivalent to one penny in 10 million dollars.)

ppm Parts per million or milligrams per liter (one part per million is equivalent to one penny in 10 thousand dollars.)

Transment Technique

TT Treatment Technique

# Regulated Contaminants

# Sample Date 2004

NOTE: Unless otherwise indicated, results represent water supplied to the distribution system by Hemphill WTP, Chatthoochee WTP and Atlanta-Fulton Co. WTP

Microbiological Monitoring Results: Total coliform bacteria-highest percentage of positive samples collected in one month									
Parameter (present or absent in sample)	MCL	MCLG	Detected Level	Violation No/Yes	Typical Source				
Total Coliform Bacteria	presence of coliform bacteria in 5.0% of monthly samples	0	1.1%	No	Naturally occuring				

Turbidity: Highest single turbidity measurement, and lowest montly percentage of samples less than 0.3 NTU									
Water Treatment Plants	Parameter/Units	Typical Source							
Hemphill & Chattahoochee: (blended water in distribution system)	Turbidity (NTU)	TT = 1 NTU	1 NTU	No					
	Turbidity (% of samples)				Soil runoff and erosion				
Atlanta-Fulton County	Turbidity (NTU)	TT = 1 NTU	0.04 NTU	No					
	Turbidity (% of samples)	TT=95% of samples <0.3 NTU	100%	No					

Organic Contaminants						
Parameter/Unit	MCL	MCLG	Detected Level	Range of Detections	Violation No/Yes	Typical Source
Total Trihalomethanes/ppb	80	NA	45	19-77	No	By-product of drinking water
Haloacetic acids/ppb	60	NA	43	19-68	No	chlorination
Total Organic Carbon (TOC) Hemphill and Chattahoochee	TT	NA	1.0	n/a	No	Naturally present
Total Organic Carbon (TOC)  Atlanta-Fulton County	TT	NA	1.0	n/a	No	

Note: TOC is a calculated removal ratio and is reported for companies as a running annual average, computed quarterly

Note: TTHMs and HAA5 = reported for compliance as a running annual average

Inorganic Contaminants										
Water Treatment Plants	Parame	eter/Units	MCL	MCLG	Detected Level	Range of Detections	Violation No/Yes	Typical Source		
Hemphill & Chattahoochee: (blended water in distribution system)	Fluoride/ppm		4	4	0.97	0.91-1.02	No	Water additive		
	Nitrate as Nitrogen/ppm		10	10	0.82	0.80-0.83	No	Fertilizer runoff		
Atlanta-Fulton County	Fluoride/ppm		4	4	0.99	1.06-0.92	No	Water additive		
Allanta-runon County	Nitrate as Nitrogen/ppm		10	10	0.42	n/a	No	Fertilizer runoff		
Parameter/Unit	MCL	MCLG	Detected Level	Range of Detections		Violation No/Yes	Typical Source			
Chlorine/ppm	4 (MRDL)	4 (MRDLG)	1.0 <0.05-2.2		No	Water additive				



City of Atlanta
Water Quality Report

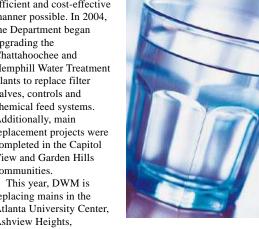
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### **Continuing Our Commitment**

The City of Atlanta Department of Watershed Management (DWM) is pleased to provide the 2004 Water Quality Report (WOR). The DWM Bureau of Drinking Water's mission is to provide clean, safe water to residents and downstream neighbors. The 2004 WOR table reveals that our drinking water continues to meet or exceed the drinking water standards established by the U.S. Environmental Protection Agency (EPA). Each year, the City conducts more than 50,000 tests to screen for more than 150 potential contaminants. The water is analyzed for hundreds of compounds. The table lists only regulated substances that were detected, even if the detected amount was below the highest level allowed by regulation.

The Bureau is continuing to rebuild the City's drinking water infrastructure in the most efficient and cost-effective manner possible. In 2004. the Department began upgrading the Chattahoochee and Hemphill Water Treatment Plants to replace filter valves, controls and chemical feed systems. Additionally, main replacement projects were completed in the Capitol View and Garden Hills communities.

replacing mains in the Atlanta University Center. Ashview Heights.



Pittsburgh, Adair Park, Washington Park, Spring Street, Midtown, Georgia Tech and Virginia-Highland communities, and is beginning the process of replacing and repairing the City's 148,000 meters. DWM also is undertaking a Water System Leakage Audit to identify malfunctioning valves and leaks in the distribution system. The Department is revamping its billing and customer service systems to ensure fairness and accuracy in billing and to better serve our customers.

## **Our Monitoring Program**



The City of Atlanta Water System and the Atlanta Regional Commission (ARC) have completed a source water assessment itemizing potential sources of surface water pollution in your drinking water supply. The results of this assessment can be found on the Internet at http:// www.atlantaregional. com/swap/ or you can request information by mail from the

Attn: Matthew Harper Environmental Planning Division Atlanta Regional Commission 40 Courtland Street, NE Atlanta, GA 30303

#### Sources of Your Water

Each day, the Atlanta water system provides approximately 120 million gallons of treated drinking water for 1.2 million residents in the metropolitan Atlanta area. All the water processed is surface water drawn from the Chattahoochee River.

The raw water intake for the Chattahoochee and Hemphill Water Treatment Plants is located on the Chattahoochee River. The Chattahoochee Plant receives the water directly from the river. The Hemphill Plant processes raw water that has been pumped from the river to a reservoir. These two plants supply about 75 percent of Atlanta's drinking water. The remaining water is supplied by the Atlanta-Fulton County Water Treatment Plant, which also processes water from the Chattahoochee River. This plant supplies drinking water to the northeast area of the City's distribution system.

#### **Facts on Contaminants**

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up

substances resulting from the presence of animals or from human activity. Contaminants that may be present in untreated source water include:

*Microbial contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff and residential uses. Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems. **Radioactive contaminants**, which can be naturally occurring or result from oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA

Some people may be more vulnerable than the general population to contaminants in drinking water. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy; persons who have undergone organ transplants; people with HIV/AIDS or other immune system disorder; some elderly; and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the EPA's Safe Drinking Water Hotline (1-800-426-4791).

prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may

reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily

indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Cryptosporidium is a microbial parasite found in surface water throughout the United States. When ingested, it can cause nausea, diarrhea, and abdominal cramps. Cryptosporidium must be ingested to cause disease; however, it may be spread through means other than drinking water. Most healthy individuals are able to overcome the disease within a few weeks. Immunocompromised people have more difficulty and are at greater risk of developing severe, lifethreatening illnesses and are encouraged to consult their doctor regarding appropriate precautions to prevent infection

### **Citizen Participation Program**

The Department of Watershed Management has a Communication and Public Outreach Division to inform citizens of water quality issues and infrastructure projects designed to improve water treatment and delivery systems. The division also includes a public education component to encourage water conservation and source water protection. For more information, please contact Marilyn Johnson at 404-330-6980.

#### **Contact Information:**

City of Atlanta • Bureau of Drinking Water, Water Quality Division 650 Bishop St. NW, Atlanta GA 30318 404-982-1458



plumbing

To obtain a copy of this report, please visit: http://apps.atlantaga.gov/citydir/water/wqr2004.pdf Please send your comments & feedback to citywater@atlantaga.gov

### **Important Information**

This Report contains very important information about your drinking water. If you do not understand it, have someone explain it to you.

Este informe contiene information muy importante. Traduscalo o hable con un amigo quien lo entienda bien.

### **About Lead and Copper**

Lead is rarely found in source water, but enters the tap water through corrosion of plumbing materials. In 1986, Congress banned the use of solder containing more than 0.2 percent lead and restricted the lead content of faucets, pipes and other plumbing materials. The regulation for lead became effective in 1992. Between 1993-1995, EPA required water suppliers to collect and analyze water samples from household taps twice a year to determine if lead was present above 15 ppb in more than 10 percent of all homes tested. (This is referred to as the Action Level for lead).

The City of Atlanta's monitoring results have shown that lead levels are found to be consistently below the Action Level. As a result, the Georgia Environmental Protection Division (EPD) authorized reduced monitoring to once per year under the Lead and Copper Rule. In 2003, based on the system's lead and copper monitoring history, EPD authorized an additional reduced monitoring requirement. The system has begun monitoring on a triennial (once every three years) basis. The next scheduled monitoring will be in 2006.

The table below shows the most recent lead and copper monitoring results. For more information about lead, consumers may contact the Safe Drinking Water Hotline at 1-800-426-4791 or visit the website www.epa.gov/safewater/lead/index.html.

Inorganic Contaminants (Sample Date 2003)										
Lead and Copper 90th percentile value of samples										
Parameter/unit	MCL	MCLG	Detected Level	Range of Detections	Violation No/Yes	Typical Source				
Copper/ppm	per/ppm AL=1.3 1.3		0.2	53 samples, no sites were found above the AL	No	Household plumbing				
Lead/ppb	Al=15	0	4.1	53 samples, 1 site was	No	Household				

found above the AL